

CODER AND CODING METHOD FOR USE IN SPREAD SPECTRUM COMMUNICATIONS SYSTEMS

ABSTRACT OF THE DISCLOSURE

5 The present invention is a coder for encoding and
decoding a digital baseband signal in spread spectrum communication
system such that the phase integrity of the carrier inversions is
preserved. The coder comprises an encoder and a decoder. The
encoder includes an exclusive “or” logic unit and a delay unit. The
10 exclusive “or” logic unit includes a first input for receiving the baseband
digital signal to be encoded. The one bit delay unit includes an input
coupled to the output of the exclusive “or” logic unit. The one bit delay
unit further includes an output coupled to a second input of the
exclusive “or” logic unit. The undelayed output of the exclusive “or”
15 logic unit provides the encoded digital baseband signal. The encoded
digital baseband signal is utilized to modulate a spread spectrum
carrier signal.